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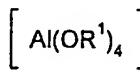
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(54) Title: CATALYST SYSTEM FOR OLEFIN POLYMERIZATION



(la)

(57) Abstract: The present invention relates to a catalyst system for olefin polymerization comprising an organic transition metal compound and, as cocatalyst, an ionic compound made up of anions of the formula (la), Where the radicals R<sup>1</sup> are identical or different and are each, independently of one another, a radical R<sup>2</sup>R<sup>3</sup>(CF<sub>3</sub>)<sub>2</sub>, R<sup>2</sup> is a carbon or silicon atom and R<sup>3</sup> is hydrogen, C<sub>1</sub>-C<sub>20</sub>-alkyl, C<sub>1</sub>-C<sub>20</sub>-fluoroalkyl, C<sub>6</sub>-C<sub>20</sub>-aryl, C<sub>6</sub>-C<sub>20</sub>-fluoroaryl, C<sub>7</sub>-C<sub>40</sub>-arylalkyl, C<sub>7</sub>-C<sub>40</sub>-fluoroarylalkyl, C<sub>7</sub>-C<sub>40</sub>-alkylaryl, C<sub>7</sub>-C<sub>40</sub>-fluoroalkylaryl or an SiR<sup>4</sup><sub>3</sub> group, where R<sup>4</sup> may be identical or different and is each C<sub>1</sub>-C<sub>20</sub>-alkyl, C<sub>1</sub>-C<sub>20</sub>-fluoroalkyl, C<sub>6</sub>-C<sub>20</sub>-aryl, C<sub>6</sub>-C<sub>20</sub>-fluoroaryl, C<sub>7</sub>-C<sub>40</sub>-arylalkyl, C<sub>7</sub>-C<sub>40</sub>-fluoroarylalkyl, C<sub>7</sub>-C<sub>40</sub>-alkylaryl or C<sub>7</sub>-C<sub>40</sub>-fluoroalkylaryl, and Lewis-acid cations or Brönsted acids as cations. In addition, the invention relates to the process for preparing such a catalyst system and to a process for the polymerization of olefins in which this catalyst system is used.